IN THE CLAIMS

Please amend the claims as follows:

Claims 1-98 (Canceled).

Claim 99 (New): A method of image formation comprising:

forming an image on a recording medium so that a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance:

$S = A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ E$, where

$0.209 \le A \le 0.249$

$0.308 \le B \le 0.439$

$3.669 \le C \le 4.984$

$0.994 \le D \le 1.461$

$-4.280 \le E \le -3.274$ ... (a)

satisfies the condition of:

$S \le 0.6708 \times Ln \, (ppm) - 2.824$

$16 \le ppm \le 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 100 (New): A method of image formation comprising:

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forming an image on a recording medium so that a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance:

$S = A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ E$, where

$0.209 \leq A \leq 0.249$

$0.308 \leq B \leq 0.439$

$3.669 \leq C \leq 4.984$

$0.994 \leq D \leq 1.461$

$-4.280 \leq E \leq -3.274$ ... (a)

satisfies the condition of:

$S \leq 0.5436 \times Ln \text{ (ppm)} - 2.5795$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 101 (New): A method of image formation comprising:

forming an image on a recording medium so that a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance:

$S = A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ E$, where

$A = +0.229$

$B = +0.373$

$C = +4.327$

$D = +1.202$

$E = -3.767$ ... (a)

satisfies the condition of:

$S \leq 0.6708 \times$ Ln (ppm) $- 2.824$

$16 \leq$ ppm ≤ 70, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 102 (New): A method of image formation apparatus comprising:

forming an image on a recording medium so that a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance:

$S = A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ E$, where

$A = +0.229$

$B = +0.373$

$C = +4.327$

D = +1.202

E = -3.767   ... (a)

satisfies the condition of:

$S \leq 0.5436 \times Ln\ (ppm) - 2.5795$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 103 (New): A method of image formation comprising:

forming an image on a recording medium so that, of loudness value, sharpness value, tonality value, impulsiveness value, and roughness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance, the roughness value satisfies the condition of not larger than 2.20 (asper), and a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value:

$S = A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ E$, where

$0.209 \leq A \leq 0.249$

$0.308 \leq B \leq 0.439$

$3.669 \leq C \leq 4.984$

$0.994 \leq D \leq 1.461$

$-4.280 \leq E \leq -3.274$ ... (a)

satisfies the condition of:

$S \le 0.6708 \times Ln \, (ppm) - 2.824$

$16 \le ppm \le 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 104 (New): A method of image formation comprising:

forming an image on a recording medium so that, of loudness value, sharpness value, tonality value, impulsiveness value, and roughness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance, the roughness value satisfies the condition of not larger than 2.20 (asper), and a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value:

$S = A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ E$, where

$0.209 \le A \le 0.249$

$0.308 \le B \le 0.439$

$3.669 \le C \le 4.984$

$0.994 \le D \le 1.461$

$-4.280 \le E \le -3.274$ ... (a)

satisfies the condition of:

$S \le 0.5436 \times Ln \, (ppm) - 2.5795$

$16 \le ppm \le 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 105 (New): A method of image formation comprising:

forming an image on a recording medium so that, of loudness value, sharpness value, tonality value, impulsiveness value, and roughness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance, the roughness value satisfies the condition of not larger than 2.20 (asper), and a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value:

S = A × (loudness value) + B × (sharpness value) + C × (tonality value) + D × (impulsiveness value) + E, where

A = +0.229

B = +0.373

C = +4.327

D = +1.202

E = -3.767   ... (a)

satisfies the condition of:

S ≤ 0.6708 × Ln (ppm) - 2.824

16 ≤ ppm ≤ 70, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 106 (New): A method of image formation comprising:

forming an image on a recording medium so that, of loudness value, sharpness value, tonality value, impulsiveness value, and relative approach value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance, the relative approach value satisfies the condition of not larger than 2.21, and a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value:

$S = A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ E$, where

$A = +0.229$

$B = +0.373$

$C = +4.327$

$D = +1.202$

$E = -3.767$ ... (a)

satisfies the condition of:

$S \leq 0.5436 \times Ln$ (ppm) $- 2.5795$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

107 (New): A method of image formation comprising:

forming an image on a recording medium so that, of loudness value, sharpness value,

tonality value, impulsiveness value, and relative approach value of psychoacoustic

parameters obtained from an operating noise at a position away from an end face of an image

formation apparatus by a predetermined distance, the relative approach value satisfies the

condition of not larger than 2.21, and a discomfort index S of sound obtained by the

following tone quality evaluation equation (a) expressed in a regression equation, using

regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness

value:

S = A × (loudness value) + B × (sharpness value) + C × (tonality value) + D ×

(impulsiveness value) + E, where

$0.209 \leq A \leq 0.249$

$0.308 \leq B \leq 0.439$

$3.669 \leq C \leq 4.984$

$0.994 \leq D \leq 1.461$

$-4.280 \leq E \leq -3.274$ ... (a)

satisfies the condition of:

$S \leq 0.6708 \times Ln\ (ppm) - 2.824$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one

minute, and Ln is natural logarithm.

Claim 108 (New): A method of image formation comprising:

forming an image on a recording medium so that, of loudness value, sharpness value,

tonality value, impulsiveness value, and relative approach value of psychoacoustic

parameters obtained from an operating noise at a position away from an end face of an image

formation apparatus by a predetermined distance, the relative approach value satisfies the condition of not larger than 2.21, and a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value:

S = A × (loudness value) + B × (sharpness value) + C × (tonality value) + D × (impulsiveness value) + E, where

$0.209 \le A \le 0.249$

$0.308 \le B \le 0.439$

$3.669 \le C \le 4.984$

$0.994 \le D \le 1.461$

$-4.280 \le E \le -3.274$ ... (a)

satisfies the condition of:

$S \le 0.5436 \times Ln\ (ppm) - 2.5795$

$16 \le ppm \le 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 109 (New): A method of image formation comprising:

forming an image on a recording medium so that, of loudness value, sharpness value, tonality value, impulsiveness value, and relative approach value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance, the relative approach value satisfies the condition of not larger than 2.21, and a discomfort index S of sound obtained by the

following tone quality evaluation equation (a) expressed in a regression equation, using

regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness

value:

S = A × (loudness value) + B × (sharpness value) + C × (tonality value) + D ×

(impulsiveness value) + E, where

A = +0.229

B = +0.373

C = +4.327

D = +1.202

E = -3.767   ... (a)

satisfies the condition of:

$S \leq 0.6708 \times Ln\ (ppm) - 2.824$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one

minute, and Ln is natural logarithm.

Claim 110 (New): A method of image formation comprising:

forming an image on a recording medium so that, of loudness value, sharpness value,

tonality value, impulsiveness value, and relative approach value of psychoacoustic

parameters obtained from an operating noise at a position away from an end face of an image

formation apparatus by a predetermined distance, the relative approach value satisfies the

condition of not larger than 2.21, and a discomfort index S of sound obtained by the

following tone quality evaluation equation (a) expressed in a regression equation, using

regression coefficients of loudness value, sharpness value, tonality value, and impulsiveness value:

$S = A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ E$, where

$A = +0.229$

$B = +0.373$

$C = +4.327$

$D = +1.202$

$E = -3.767$ ... (a)

satisfies the condition of:

$S \leq 0.5436 \times Ln \, (ppm) - 2.5795$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 111 (New): A method of image formation comprising:

forming an image on a recording medium so that a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of sound pressure level, loudness value, sharpness value, tonality value, and impulsiveness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance, and ppm value:

$S = G \times$ (sound pressure level) $+ A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ F \times$ (ppm value) $+ E$, where

$0.0442 \leq G \leq 0.0830$

$0.0678 \leq A \leq 0.1677$

$0.3629 \leq B \leq 0.5084$

$2.5473 \leq C \leq 4.0677$

$-0.0533 \leq D \leq 0.3279$

$-0.0058 \leq F \leq 0.0006$

$-3.7769 \leq E \leq 7.6274$ ... (a)

satisfies the condition of:

$S \leq 0.5432 \times Ln\ (ppm) - 2.3398$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one

minute, and Ln is natural logarithm.

Claim 112 (New): A method of image formation comprising:

forming an image on a recording medium so that a discomfort index S of sound

obtained by the following tone quality evaluation equation (a) expressed in a regression

equation, using regression coefficients of sound pressure level, loudness value, sharpness

value, tonality value, and impulsiveness value of psychoacoustic parameters obtained from an

operating noise at a position away from an end face of an image formation apparatus by a

predetermined distance, and ppm value:

$S = G \times$ (sound pressure level) $+ A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$

(tonality value) $+ D \times$ (impulsiveness value) $+ F \times$ (ppm value) $+ E$, where

$0.0442 \leq G \leq 0.0830$

$0.0678 \leq A \leq 0.1677$

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$0.3629 \leq B \leq 0.5084$

$2.5473 \leq C \leq 4.0677$

$-0.0533 \leq D \leq 0.3279$

$-0.0058 \leq F \leq 0.0006$

$-3.7769 \leq E \leq 7.6274$ ... (a)

satisfies the condition of:

$S \leq 0.416 \, Ln \, (ppm) - 2.0952$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.

Claim 113 (New): A method of image formation comprising:

forming an image on a recording medium so that a discomfort index S of sound obtained by the following tone quality evaluation equation (a) expressed in a regression equation, using regression coefficients of sound pressure level, loudness value, sharpness value, tonality value, and impulsiveness value of psychoacoustic parameters obtained from an operating noise at a position away from an end face of an image formation apparatus by a predetermined distance, and ppm value:

$S = G \times$ (sound pressure level) $+ A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$ (tonality value) $+ D \times$ (impulsiveness value) $+ F \times$ (ppm value) $+ E$, where

$G = +0.0636$

$A = +0.1178$

$B = +0.4356$

$C = +3.3075$

D = +0.1373

F = -0.0026

E = -5.7022   ... (a)

satisfies the condition of:

$S \leq 0.5432 \times Ln\,(ppm) - 2.3398$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one

minute, and Ln is natural logarithm.

114 (New): A method of image formation comprising:

forming an image on a recording medium so that a discomfort index S of sound

obtained by the following tone quality evaluation equation (a) expressed in a regression

equation, using regression coefficients of sound pressure level, loudness value, sharpness

value, tonality value, and impulsiveness value of psychoacoustic parameters obtained from an

operating noise at a position away from an end face of an image formation apparatus by a

predetermined distance, and ppm value:

$S = G \times$ (sound pressure level) $+ A \times$ (loudness value) $+ B \times$ (sharpness value) $+ C \times$

(tonality value) $+ D \times$ (impulsiveness value) $+ F \times$ (ppm value) $+ E$, where

G = +0.0636

A = +0.1178

B = +0.4356

C = +3.3075

D = +0.1373

F = -0.0026

$E = -5.7022$ ... (a)

satisfies the condition of:

$S \leq 0.416 \, Ln \, (ppm) - 2.0952$

$16 \leq ppm \leq 70$, and

where ppm is defined as the number of sheets of A4 lateral size paper printed in one minute, and Ln is natural logarithm.